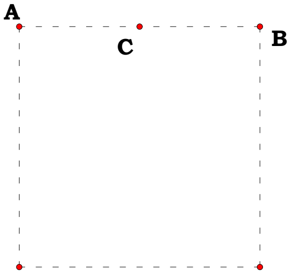
CHAPTER I

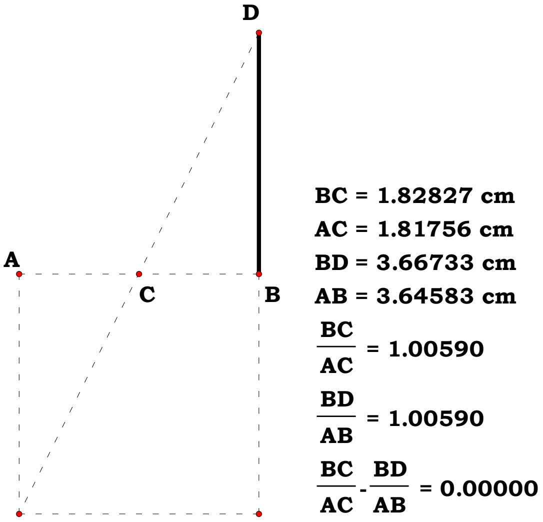
Tracing the Curve.[1]

Let me say, I am going to use what I called a Jacob's Ladder approach, all we need is the first, or unit, rung. It should be realized that in plain geometry, the unit is actually a square. Two dimensional means two binary recursions of the unit.

Given the unit, and any ratio of the unit, determine the Conic.



Let AB be the Given Unit, and $\frac{BC}{AC}$ be e, the eccentricity of the conic.


D
A
C
B
BC = 1.82827 cm
AC = 1.81756 cm
BD = 3.66733 cm
AB = 3.64583 cm
$\frac{BC}{AC} = 1.00590$
$\frac{BD}{AB} = 1.00590$
$\frac{BC}{AC} - \frac{BD}{AB} = 0.00000$

Construct the Lotus Rectum BD.

As BC : AC :: BD : AB.

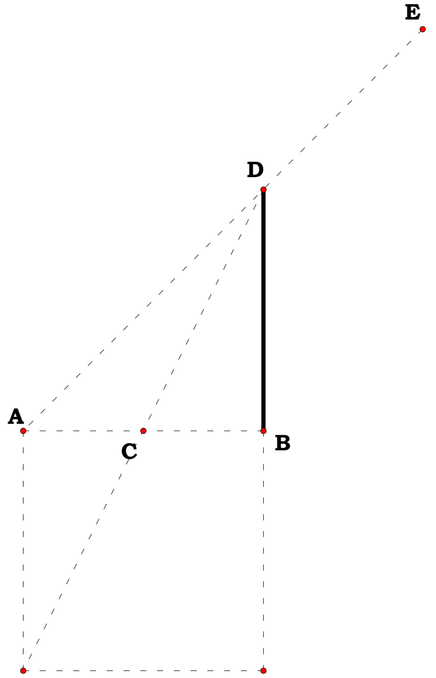
---

[1] I am going to be honest, I am absolutely baffled as the conic is said to have been studied for around 2,500 years, and yet I have not found an author in these books who could draw it correctly. Proof that education cannot change one's innate level of intelligence. Most people learn to parrot, and do little else.

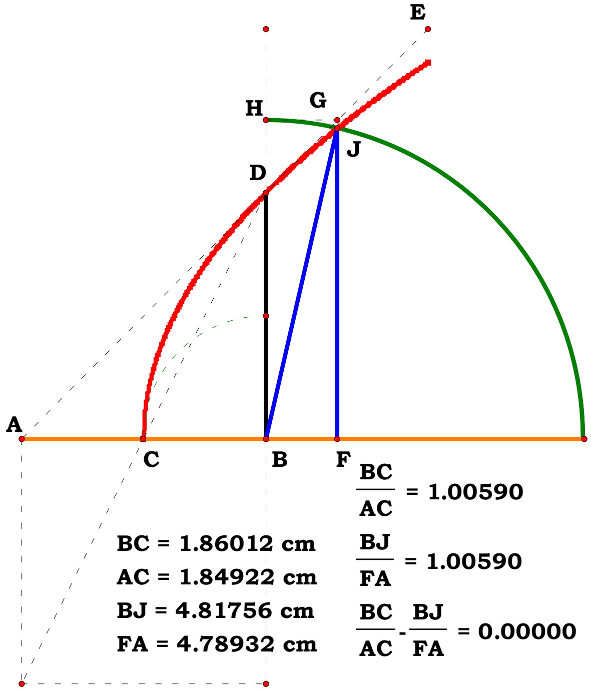
Construct e to any point E.

AE is the slope e.

Every ratio projects as a slope. AE is that slope. One should keep in mind, the slope is not a function of *x* and *y* on some cheap imitation of a ruler, but a ratio expressible exactly by the simple unit.



For any point AF, which is greater than AC, construct FG meeting the slope e.



Construct GH perpendicular to the Lotus Rectum BD. Construct the circle BH. If the circle intersects FG, then let that intersection be J.

J is a point on the conic locus e. Let us say that the locus is the visual presentation of e. Ewh, mystical! A plague of locus in the 21st Century!

BC : AC :: BJ : AF.

By construction of the definition of a conic. It cannot get any simpler than this.

How can you tell that so called Cartesian Geometry is not actually geometry? Euclidian Geometry affords an exact product. You cannot measure anything during construction, but you can construct a Euclidean calculation giving exact answers to any mathematical problem. You do not measure, you have the geometry show you step by step. Cartesian Geometry is a branch of applied arithmetic. The name is a misnomer, it should be called Cartesian Applied Arithmetic as the x, y axis are used arithmetically, i.e. points are guestimated.